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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,904	09/26/2003	Todd Ames	2005.20	8014

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EXAMINER	
VANATTA, AMY B	

ART UNIT	PAPER NUMBER
3765	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/671,904	AMES ET AL.	
	Examiner	Art Unit	
	Amy B. Vanatta	3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) *3,4,9 and 10* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-8,11 and 12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-12* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *012004, 092304*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restriction

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

I. Fig. 6a (rectangular shaped orifice)
II. Fig. 6b (triangular shaped orifice)
III. Fig. 6d (serrated or toothed shaped orifice)

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1, 5-7, 11 and 12 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record

showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Scott Hanf on September 20, 2005 a provisional election was made with traverse to prosecute the invention of species I, Fig. 6a (rectangular shaped orifice), claims 2 and 8. Affirmation of this election must be made by applicant in replying to this Office action. Claims 3, 4, 9 and 10 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 5, 7, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Document 60-26537 to Suzuki et al.

JP 60-26537 discloses a method for making an absorbent composite including spreading a crimped tow (by air opening device 14), de-registering the crimped tow (by rollers 16a, 16b and 17a, 17b), and shaping the de-registered tow by device 18 which has "a guide to control the width of the tow" (see page 5, lines 29-31). Suzuki et al also disclose an apparatus as claimed including a means (14) for spreading a crimped tow, a means (16a, 16b, 17a, 17b) for deregistering the tow, and a means (18) for shaping the deregistered tow. Regarding the 35 U.S.C. 112, sixth paragraph "means plus function" limitations recited in claim 7, Suzuki discloses a means for spreading (14) which is an air banding jet, as is the means for spreading disclosed by applicants. The means for deregistering the tow which is disclosed by Suzuki has the same structure for performing the same function as disclosed by applicant, that is, de-registering rollers (see rollers 16a, 16b, 17a, 17b of Suzuki). The means for shaping the deregistered tow disclosed by Suzuki appears to be the same as or equivalent to applicants' means for shaping, the means for shaping (18) of Suzuki including air jet nozzles and a guide. With further regard to Suzuki, it is disclosed that the shaped tow is led to conveyor 19 to be covered with pulverized pulp 21 (page 5, lines 33-34). It is disclosed that this pulp may include absorbent polymer powder (page 5, lines 34-35), which is a "particulate" as claimed. This particulate (i.e. the powder mixed with the pulp) is distributed onto the shaped tow as in claim 1. Spreader 20 forms a means for distributing the particulate onto the tow, as in claim 7. The distributing spreader 20 of Suzuki appears to be

equivalent to the particulate distribution apparatus disclosed as the "means for distributing" of applicants. The spreader 20 has a "shaped orifice" at the bottom (see Fig. 4), out of which the pulp and powder mixture flows. This orifice inherently controls the rate at which the mixture flows out of the spreader by virtue of its size and shape (see Fig. 4). Regarding claims 5 and 11, the tow is shaped to a substantially rectangular cross section as seen in Figs. 3A-3C.

6. Claims 1, 2, 5-8, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Crawford et al (US 3,017,309).

Crawford et al disclose a method for making an absorbent composite including spreading a crimped tow (by banding device 13), de-registering the crimped tow (by rollers 16, 17, and vibrator 19), and shaping the de-registered tow (by device 22 with chamber 29; also see col. 4, lines 35-38). Crawford et al also disclose an apparatus as claimed including a means (13) for spreading a crimped tow, a means (16, 17, 19) for deregistering the tow, and a means (22,29) for shaping the deregistered tow. Particulate ("powder"; col. 5, lines 17-21) is distributed onto the shaped tow as in claim 1. Regarding the 35 U.S.C. 112, sixth paragraph "means plus function" limitations recited in claim 7, Crawford discloses a means for spreading (13) which is a banding device, as is the means for spreading disclosed by applicants. The means for deregistering the tow which is disclosed by Crawford has the same structure for performing the same function as disclosed by applicant, that is, de-registering rollers (see rollers 16,17 of Suzuki). The means for shaping the deregistered tow disclosed by

Crawford is equivalent to applicants' means for shaping, the means for shaping (22,29) of Crawford performing the same function in the same way, and producing the same result as the "means for shaping" of applicants. Dusting apparatus 37 forms a means for distributing the particulate onto the tow, as in claim 7. The dusting apparatus 37 of Crawford appears to be equivalent to the particulate distribution apparatus disclosed as the "means for distributing" of applicants. The dusting apparatus has a "shaped orifice" (see orifice of nozzle 45 or 48; Fig. 1), out of which the powder flows. This orifice inherently controls the rate at which the particulate flows out of the apparatus by virtue of its size and shape (see Fig. 1). The orifice of nozzle 45 or 48 is shown to be rectangular (see Fig. 1), as in claims 2 and 8. Regarding claims 5 and 11, the tow is shaped to a substantially rectangular cross section (see rectangular shape of the shaping apparatus as shown in Fig. 3). Regarding claims 6 and 12, a liquid is applied to the tow by a means (33) for applying a liquid to the tow (see spray chamber 33).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 2, 5-8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ames et al (US 6,253,341) in view of Baker (US 2003/0130638).

In US 6,253,341, Ames et al disclose a method for making an absorbent composite including spreading a crimped tow (by banding jet 130), de-registering the crimped tow (by roller assemblies 40, 60, 70; col. 4, lines 21-25 and col. 5, lines 1-4), and shaping the de-registered tow (by device 240). Ames et al also disclose an apparatus as claimed including a means (banding jet 130) for spreading a crimped tow, a means (roller assemblies 40, 60, 70) for deregistering the tow, and a means (240) for shaping the deregistered tow. Particulate is distributed onto the shaped tow as in claim 1 (see col. 5, lines 35-44). Regarding the 35 U.S.C. 112, sixth paragraph "means plus function" limitations recited in claim 7, Ames discloses a means for spreading (130) which is an air banding jet, as is the means for spreading disclosed by applicants. The means for deregistering the tow which is disclosed by Ames has the same structure for performing the same function as disclosed by applicant, that is, de-registering rollers (see roller assemblies 40,60,70 of Ames). The means for shaping the deregistered tow (240) disclosed by Ames is the same as the means for shaping disclosed by applicants (see page 11 of applicants' specification). A feeder 120 forms a means for distributing the particulate onto the tow. The details of the structure of the feeder which distributes the particulate onto the tow are not disclosed by Ames. Thus, Ames does not disclose that the feeder has a shaped opening which controls distribution of the particulate, as in claims 1 and 7. Baker discloses a feeder (see 334 in Figs. 5A, 5B, 7, and 8) which distributes particulate (e.g. SAP or other particulates; see paragraphs 0019, 0119 and 0124) onto tow 312. This feeder is a means for distributing as recited in claim 7. The feeder includes a shaped orifice which is formed by gate 408 (see opening at the

bottom of the gate through which the particulate flows; Figs 5A, 5B, 7 and), and this orifice size is controlled by the position of the gate to control distribution of the particulate (0124). The orifice is rectangular (see Fig. 8) as in claims 2 and 8. Baker teaches that such a structure for the feeder results in improved control over the flow rate and distribution of the particulate, and may be used at relatively high manufacturing speeds (see, e.g., 0120, 0126, 0144, 0145). It would have been obvious to one having ordinary skill in the art at the time the invention was made to distribute the particulate in the method and apparatus of Ames et al by using a feeder which includes a gate forming a rectangular shaped orifice through which the particulate flows, in order to better control the flow rate and distribution of the particulate and to permit high manufacturing speeds, such as taught by Baker.

Regarding claims 5 and 11, Ames discloses that the tow is shaped to a substantially rectangular cross section (col. 6, lines 56-57). Ames discloses that a liquid is applied to the tow, as in claim 6. Ames discloses a means (80) for applying a liquid to the tow, as in claim 12. Ames teaches that this means may be a liquid additive assembly which includes spray nozzles (col. 5, lines 19-20), which are the same structure, performing the same function, as applicants' means for applying a liquid.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy B. Vanatta whose telephone number is 571-272-4995. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on 571-272-4983. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Amy B Vanatta
Primary Examiner
Art Unit 3765